

### **Volumetrics Inc.**

3710 East Rio Grande St, Victoria, TX-77901 Phone: 361-827-4024

Company: OXY USA INC
Field/Location: NMSW

Station Name: CORRAL 1 COMP STATION ENERGY TRANSFER CHECK

 Station Number :
 18000C

 Sample Date:
 2/23/22 9:45 AM

 Analysis Date:
 3/7/22 12:45 PM

 Instrument:
 INFICON

Calibration/Verification Date: 3/7/2022 Heat Trace used: YES Work Order 4000424956 Sampled by: OXY/JE

Sample Type : SPOT-CYLINDER

Sample Temperature (F): 93
Sample Pressure (PSIG): 1230
Flow rate (MCF/Day): 16257
Ambient Temperature (F): 23

Sampling method: FILL & EMPTY

Cylinder Number: 27764

## **NATURAL GAS ANALYSIS: GPA 2261**

	Un-Normalized	Normalized	GPM	GPM	GPM
Components	Mol%	Mol%	14.650	14.730	15.025
Hydrogen Sulfide	0.0000	0.0000			
Nitrogen	1.4221	1.4522			
Methane	74.0532	75.6211			
Carbon Dioxide	0.1772	0.1809			
Ethane	12.0085	12.2627	3.273	3.291	3.357
Propane	6.0764	6.2050	1.706	1.716	1.750
Isobutane	0.8466	0.8645	0.282	0.284	0.290
N-butane	1.9936	2.0358	0.641	0.644	0.657
Isopentane	0.4162	0.4250	0.155	0.156	0.159
N-Pentane	0.4438	0.4532	0.164	0.165	0.168
Hexanes Plus	0.4893	0.4996	0.218	0.219	0.223
Total	97.9269	100.0000			

Hexanes plus split (60%-30%-10%)

Physical Properties (Calculated)	14.650 psia	14.730 psia	15.025 psia
Total GPM Ethane+	6.440	6.475	6.604
Total GPM Iso-Pentane+	0.537	0.540	0.550
Compressibility (Z)	0.9961	0.9961	0.9960
Specific Gravity (Air=1) @ 60 °F	0.7562	0.7562	0.7563
Molecular Weight	21.826	21.826	21.826
Gross Heating Value	14.650 psia	14.730 psia	15.025 psia
Dry, Real (BTU/Ft <sup>3</sup> )	1293.2	1300.3	1326.4
Wet, Real (BTU/Ft <sup>3</sup> )	1270.7	1277.6	1303.3
Dry, Ideal (BTU/Ft <sup>3</sup> )	1288.2	1295.2	1321.2
Wet, Ideal (BTU/Ft <sup>3</sup> )	1265.8	1272.7	1298.2

Temperature base 60 °F

Comment: FIELD H2S = 0 PPM

Verified by

Mostaq Ahammad Petroleum Chemist Approved by

Deann Friend

Deann Friend Laboratory Manager

### **UPSET VENT EVENT SPECIFIC JUSTIFICATIONS FORM**

Facility: Corral 1S CS Vent Date: 06/25/2022

**Duration of event:** 7 Hours 0 Minutes MCF Vented: 131

Start Time: 12:00 AM End Time: 07:00 AM

Cause: Equipment Malfunction > VRU > Dump Issue on VRT

Method of Flared Gas Measurement: Gas Flare Meter

**Comments:** This upset event was not caused by any wells associated with the facility.

## 1. Reason why this event was beyond Operator's control:

This emissions event was caused by the unforeseen, unexpected, sudden, and unavoidable breakdown of equipment or process that was beyond the owner/operator's control and did not stem from activity that could have been foreseen and avoided, and could not have been avoided by good design, operation, and preventative maintenance practices. Oxy engages in respectable and good facility operation practices while also maintaining its continuous facility equipment preventative maintenance program. In this case, this venting event began on June 24, 2022, around 05:00 PM and ended the next day on June 25, 2022, around 07:00 AM. Venting arose when the VRT malfunctioned on a hihi level, which was caused by the rising dumping frequency from the compression equipment, thusly overloading the VRU and triggering an automatic shutdown of the unit. While the VRU was shut down, the tank pressure rose above the venting threshold for the thief hatches on top of the tanks, which then triggered the tanks to vent, which was not discovered until June 25, 2022, when the Oxy production tech was making his daily inspection of the facility and its equipment. Once the venting was discovered, the Oxy production tech quickly adjusted the dumping cycle on the VRT and then proceeded to restart the VRU. After some time, the venting ceased. The facility equipment was running and operating as designed prior to the malfunctions occurring.

## 2. Steps Taken to limit duration and magnitude of venting or flaring:

In this case, this venting event began on June 24, 2022, around 05:00 PM and ended the next day on June 25, 2022, around 07:00 AM. Venting arose when the VRT malfunctioned on a hihi level, which was caused by the rising dumping frequency from the compression equipment, thusly overloading the VRU and triggering an automatic shutdown of the unit. While the VRU was shut down, the tank pressure rose above the venting threshold for the thief hatches on top of the tanks, which then triggered the tanks to vent, which was not discovered until June 25, 2022, when the Oxy production tech was making his daily inspection of the facility and its equipment. Once the venting was discovered, the Oxy production tech quickly adjusted the dumping cycle on the VRT and then proceeded to restart the VRU. After some time, the venting ceased. The facility equipment was running and operating as designed prior to the malfunctions occurring.

## 3. Corrective Actions taken to eliminate the cause and reoccurrence of venting or flaring:

Oxy is limited in the corrective actions to eliminate the cause and reoccurrence of venting in this type of equipment malfunction as notwithstanding normal equipment design and operation, emergencies, and malfunctions, can occur without warning, be sudden, unforeseeable, and unavoidable. In addition, field operation equipment is inherently dynamic and even the smallest mechanical issue can be sudden, reasonably unforeseeable, and unexpected which can cause malfunctions to occur without warning. Oxy continually strives to maintain and operate in a manner consistent with good practice for minimizing emissions and reducing the number of emission events. It is OXY's policy to flare, rather than vent, during an unforeseen and unavoidable emergency or malfunction, to minimize emissions as much as possible, yet, in this circumstance, a sudden and unexpected equipment malfunction caused venting to occur, which was unavoidable. OXY made every effort to control and minimize emissions as much as possible during this sudden and unexpected venting event.

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Phone: (575) 393-6161 Fax: (575) 393-0720 District II

811 S. First St., Artesia, NM 88210 Phone:(575) 748-1283 Fax:(575) 748-9720 District III

1000 Rio Brazos Rd., Aztec, NM 87410 Phone:(505) 334-6178 Fax:(505) 334-6170

1220 S. St Francis Dr., Santa Fe, NM 87505 Phone:(505) 476-3470 Fax:(505) 476-3462

# **State of New Mexico Energy, Minerals and Natural Resources Oil Conservation Division** 1220 S. St Francis Dr. **Santa Fe, NM 87505**

DEFINITIONS

Action 125258

#### **DEFINITIONS**

Operator:	OGRID:
OXY USA INC	16696
P.O. Box 4294	Action Number:
Houston, TX 772104294	125258
	Action Type:
	[C-129] Venting and/or Flaring (C-129)

#### **DEFINITIONS**

For the sake of brevity and completeness, please allow for the following in all groups of questions and for the rest of this application:

- this application's operator, hereinafter "this operator";
- · venting and/or flaring, hereinafter "vent or flare";
- any notification or report(s) of the C-129 form family, hereinafter "any C-129 forms";
- the statements in (and/or attached to) this, hereinafter "the statements in this";
- and the past tense will be used in lieu of mixed past/present tense questions and statements.

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# **State of New Mexico Energy, Minerals and Natural Resources Oil Conservation Division** 1220 S. St Francis Dr. **Santa Fe, NM 87505**

QUESTIONS

Action 125258

Phone: (505) 476-3470 Fax: (505) 476-3462	•	
Q	UESTIONS	
Operator:		OGRID:
OXY USA INC		16696
P.O. Box 4294 Houston, TX 772104294		Action Number:
110uStoff, 1X 112104254		125258 Action Type:
		[C-129] Venting and/or Flaring (C-129)
QUESTIONS		
Prerequisites		
Any messages presented in this section, will prevent submission of this application. Please resolve	these issues before continuing w	ith the rest of the questions.
Incident Well	Not answered.	
Incident Facility	[fAPP2126641362] CORRA	AL#1 COMP STATION
Determination of Reporting Requirements		
Answer all questions that apply. The Reason(s) statements are calculated based on your answers at Was this vent or flare caused by an emergency or malfunction	Yes	9.
Did this vent or flare last eight hours or more cumulatively within any 24-hour		
period from a single event	No	
Is this considered a submission for a vent or flare event	Yes, minor venting and/or	flaring of natural gas.
An operator shall file a form C-141 instead of a form C-129 for a release that, includes liquid during v	renting and/or flaring that is or ma	y be a major or minor release under 19.15.29.7 NMAC.
Was there at least 50 MCF of natural gas vented and/or flared during this event	Yes	
Did this vent or flare result in the release of ANY liquids (not fully and/or completely		
flared) that reached (or has a chance of reaching) the ground, a surface, a	No	
watercourse, or otherwise, with reasonable probability, endanger public health, the environment or fresh water		
Was the vent or flare within an incorporated municipal boundary or withing 300 feet		
from an occupied permanent residence, school, hospital, institution or church in	No	
existence		
Equipment Involved		
	1	
Primary Equipment Involved	Other (Specify)	
Additional details for Equipment Involved. Please specify	Venting > Equipment Malfu	unction > VRU > Dump Issue on VRT
Representative Compositional Analysis of Vented or Flared Natural Gas		
Please provide the mole percent for the percentage questions in this group.		
Methane (CH4) percentage	76	
Nitrogen (N2) percentage, if greater than one percent	1	
Hydrogen Sulfide (H2S) PPM, rounded up	0	
Carbon Dioxide (C02) percentage, if greater than one percent	0	
Oxygen (02) percentage, if greater than one percent	0	
If you are venting and/or flaring because of Pipeline Specification, please provide the required specification, please provide the required specification.	Not answered.	
Methane (CH4) percentage quality requirement		
Nitrogen (N2) percentage quality requirement	Not answered.	
Hydrogen Sufide (H2S) PPM quality requirement	Not answered.	
Carbon Dioxide (C02) percentage quality requirement	Not answered.	
Oxygen (02) percentage quality requirement	Not answered.	

QUESTIONS, Page 2

Action 125258

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District III

1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV

District IV 1220 S. St Francis Dr., Santa Fe, NM 87505 Phone:(505) 476-3470 Fax:(505) 476-3462

# **State of New Mexico Energy, Minerals and Natural Resources Oil Conservation Division** 1220 S. St Francis Dr. **Santa Fe, NM 87505**

QUESTIONS (continued)

Operator: OXY USA INC		OGRID: 16696
P.O. Box 4294		Action Number:
Houston, TX 772104294		125258
		Action Type:  [C-129] Venting and/or Flaring (C-129)
QUESTIONS		, , , , , , , , , , , , , , , , , , , ,
Date(s) and Time(s)		
Date vent or flare was discovered or commenced	06/25/2022	
Time vent or flare was discovered or commenced	12:00 AM	
Time vent or flare was terminated	07:00 AM	
Cumulative hours during this event	7	
Measured or Estimated Volume of Vented or Flared Natural Gas		
Natural Gas Vented (Mcf) Details	Cause: Other   Other (Spec Lost: 131 Mcf ]	ify)   Natural Gas Vented   Released: 131 Mcf   Recovered: 0 Mcf
Natural Gas Flared (Mcf) Details	Not answered.	
Other Released Details	Not answered.	
Additional details for Measured or Estimated Volume(s). Please specify	Vent Meter	
Is this a gas only submission (i.e. only significant Mcf values reported)	Yes, according to supplied	d volumes this appears to be a "gas only" report.
Manting of Floring Populting from Population Asticity		
Venting or Flaring Resulting from Downstream Activity		
Was this vent or flare a result of downstream activity	No	
Was notification of downstream activity received by this operator	Not answered.	
Downstream OGRID that should have notified this operator	Not answered.	
Date notified of downstream activity requiring this vent or flare  Time notified of downstream activity requiring this vent or flare	Not answered.	
Time housed of downstream activity requiring this vent of hare	Not answered.	
Steps and Actions to Prevent Waste		
For this event, this operator could not have reasonably anticipated the current event and it was beyond this operator's control.	True	
Please explain reason for why this event was beyond this operator's control	day on June 25, 2022, arou level, which was caused by thusly overloading the VRU was shut down, the tank pr top of the tanks, which then 25, 2022, when the Oxy prequipment. Once the ventir dumping cycle on the VRT.	ent began on June 24, 2022, around 05:00 PM and ended the next and 07:00 AM. Venting arose when the VRT malfunctioned on a hihi of the rising dumping frequency from the compression equipment, and triggering an automatic shutdown of the unit. While the VRU essure rose above the venting threshold for the thief hatches on a triggered the tanks to vent, which was not discovered until June obduction tech was making his daily inspection of the facility and its go was discovered, the Oxy production tech quickly adjusted the and then proceeded to restart the VRU. After some time, the vequipment was running and operating as designed prior to the
Steps taken to limit the duration and magnitude of vent or flare	day on June 25, 2022, arou level, which was caused by thusly overloading the VRU was shut down, the tank pr top of the tanks, which then 25, 2022, when the Oxy prequipment. Once the ventin dumping cycle on the VRT	ent began on June 24, 2022, around 05:00 PM and ended the next and 07:00 AM. Venting arose when the VRT malfunctioned on a hihi / the rising dumping frequency from the compression equipment, and triggering an automatic shutdown of the unit. While the VRU essure rose above the venting threshold for the thief hatches on a triggered the tanks to vent, which was not discovered until June oduction tech was making his daily inspection of the facility and its ag was discovered, the Oxy production tech quickly adjusted the and then proceeded to restart the VRU. After some time, the vequipment was running and operating as designed prior to the
Corrective actions taken to eliminate the cause and reoccurrence of vent or flare	this type of equipment mall operation, emergencies, ar unforeseeable, and unavoid and even the smallest medunexpected which can caus maintain and operate in a land reducing the number of during an unforeseen and much as possible, yet, in the malfunction caused venting	ive actions to eliminate the cause and reoccurrence of venting in function as notwithstanding normal equipment design and and malfunctions, can occur without warning, be sudden, dable. In addition, field operation equipment is inherently dynamic chanical issue can be sudden, reasonably unforeseeable, and se malfunctions to occur without warning. Oxy continually strives to manner consistent with good practice for minimizing emissions of emission events. It is OXY's policy to flare, rather than vent, unavoidable emergency or malfunction, to minimize emissions as his circumstance, a sudden and unexpected equipment to occur, which was unavoidable. OXY made every effort to control is much as possible during this sudden and unexpected venting

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ACKNOWLEDGMENTS

Action 125258

### **ACKNOWLEDGMENTS**

Operator:	OGRID:
OXY USA INC	16696
P.O. Box 4294	Action Number:
Houston, TX 772104294	125258
	Action Type:
	[C-129] Venting and/or Flaring (C-129)

#### **ACKNOWLEDGMENTS**

✓	I acknowledge that I am authorized to submit a <i>Venting and/or Flaring</i> (C-129) report on behalf of this operator and understand that this report can be <b>a complete</b> C-129 submission per 19.15.27.8 and 19.15.28.8 NMAC.
V	I acknowledge that upon submitting this application, I will be creating a new incident file (assigned to this operator) to track any C-129 forms, pursuant to 19.15.27.7 and 19.15.28.8 NMAC and understand that this submission meets the notification requirements of Paragraph (1) of Subsection G and F respectively.
V	I hereby certify the statements in this report are true and correct to the best of my knowledge and acknowledge that any false statement may be subject to civil and criminal penalties under the Oil and Gas Act.
V	I acknowledge that the acceptance of any C-129 forms by the OCD does not relieve this operator of liability should their operations have failed to adequately investigate, report, and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment.
V	I acknowledge that OCD acceptance of any C-129 forms does not relieve this operator of responsibility for compliance with any other applicable federal, state, or local laws and/or regulations.

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CONDITIONS

Action 125258

## **CONDITIONS**

Operator:	OGRID:
OXY USA INC	16696
P.O. Box 4294	Action Number:
Houston, TX 772104294	125258
	Action Type:
	[C-129] Venting and/or Flaring (C-129)

#### CONDITIONS

Created By	Condition	Condition Date
marialuna2	If the information provided in this report requires an amendment, submit a [C-129] Amend Venting and/or Flaring Incident (C-129A), utilizing your incident number from this event.	7/13/2022